LONG-TERM MANAGEMENT STRATEGY (LTMS) FOR THE PLACEMENT OF DREDGED MATERIAL IN THE SAN FRANCISCO BAY REGION

DRAFT

Policy Environmental Impact Statement/
Programmatic Environmental Impact Report

Volume II
Appendices

April, 1996

Prepared by

U.S. Environmental Protection Agency, Region 9
U.S. Army Corps of Engineers, San Francisco District
San Francisco Bay Conservation and Development Commission
San Francisco Bay Regional Water Quality Control Board
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Prepared by

The LTMS Multi-Agency Writing Team

U.S. Environmental Protection Agency (EPA) — Brian Ross
San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) — Kim Taylor
San Francisco Bay Conservation and Development Commission (BCDC) — Eric Larson

with Document Production Assistance by

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APPENDIX A

LTMS Participants Past and Present

LTMS PARTICIPANTS — PAST AND PRESENT

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*Indicates that members served on the committee in the past but are no longer active members

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\+ Inactive Workgroup
• Work Completed

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Port of Oakland

Environmental Review+
Ron Bachman, chair
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Janet Hashimoto, chair
Gail Louis , chair
Rebecca Tuden, chair
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Cynthia Koehler, chair
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(The listing of more than one name per agency or organization indicates that more than one person has held the position since 1990)

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APPENDIX B

California Environmental Quality Act Environmental Assessment Checklist for the Long-Term Management Strategy for San Francisco Bay Area Dredged Material

CALIFORNIA ENVIRONMENTAL QUALITY ACT
ENVIRONMENTAL ASSESSMENT CHECKLIST
for the
LONG TERM MANAGEMENT STRATEGY
FOR SAN FRANCISCO BAY AREA DREDGED MATERIAL[1]

I. BACKGROUND

This California Environmental Quality Act Environmental Assessment Checklist reviews the potential of adverse environmental impacts associated with the implementation of the Long Term Management Strategy for San Francisco Bay area dredged material (LTMS). It is recognized that the San Francisco Bay/Delta Estuary is a critical national thoroughfare for maritime commerce, including international trade, commercial and recreational fishing, and recreation. For over a century navigational waterways have been created, deepened, and maintained by dredging (the removal of sediments from the bottom) to enable ships to navigate safely into and out of ports, harbors, and marinas without running aground. Today's large commercial ships require deeper channels than ever before, and prospects are for even larger ships in the future. Dredging of the region's channels, ports and associated docking, berthing and other facilities will therefore continue to be necessary to maintain adequate depths for vessels to maneuver.

At the same time, the San Francisco Bay/Delta system is the largest and most significant estuary on the entire west coast of North and South America. Over 40 percent of the land area of the state of California — with 60 percent of the state's runoff — drains into the Estuary where it mixes with the saline waters of the Pacific Ocean. This results in estuarine conditions that support among the most productive kinds of ecosystems in the world. The past hundred-plus years of intensive human settlement and development in the Bay area have severely stressed the Estuary, and brought fundamental changes to its ecosystem. Chief among the causes of significant adverse impacts have been: extensive habitat loss from diking and filling of baylands and wetlands to create farming and industrial land (over 90 percent of the area's historic salt and brackish marshes have been destroyed); huge diversions of fresh water from the Estuary to Central Valley farms, and to cities as far away as Southern California (up to 75 percent of the flow of the Sacramento River is diverted before it reaches the Estuary); and pollution from point- and non-point discharges. Compared to these large-scale perturbations, changes associated with dredging and dredged material disposal are much less significant. However, dredging and disposal are often very visible, and the public has expressed concerns about the potential for both direct and cumulative effects of these activities on the already-stressed resources of the Estuary.

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[1] Pursuant to the California Environmental Quality Act (CEQA) regulation (14 CCR, Sections 15060(c) and 15063(a), the participating LTMS agencies (including the California State Water Resources Control Board, the California State Lead Agency for CEQA) determined that a Policy Level Environmental Impact Statement [EIS]/Programmatic Level Environmental Impact Report [EIR] would be necessary to address the potential adverse and beneficial impacts associate with the implementation of the LTMS. Therefore, all potential adverse impacts listed in Section III of this Environmental Assessment Checklist which were identified as MAYBE or YES are addressed fully within the Policy EIS/Programmatic EIR.

In recent years, concerted efforts have started to reverse some of the negative impacts that development has brought to the Estuary. For example, substantial progress has been made over the last two decades in regulating point-source industrial and municipal discharges so that, for many pollutants, loading from these sources today is less than ten percent of what it was just 20 years ago (SFEP 1992b). Similarly, the rate of filling of remaining Estuary wetland habitats and baylands has slowed dramatically in recent years. In 1994, an historic accord was reached on Delta water quality, diversion limits, and non-flow habitat restoration (Landmark Accord on Bay/Delta Protection 1995), to better balance the irrigation and drinking water demands of farms and cities with the fresh water flow and habitat needs of the Estuary. In addition, the San Francisco Estuary Project (described later in this chapter) completed a Comprehensive Conservation and Management Plan (CCMP) for the Estuary that was signed by both the State and Federal governments in 1993 (SFEP 1994). The CCMP contained a range of action items for addressing specific environmental problems facing the Estuary, including dredging and waterway modification. Development of a Long Term Management Strategy for San Francisco Bay area dredged material was one aspect of maintaining and improving the environmental quality of the Estuary called for in the CCMP. The following sections describe the San Francisco LTMS process, its organization, and its goals.

II. THE SAN FRANCISCO AREA LTMS

The LTMS was established to create a partnership among agencies, navigation interests, fishing interests, environmental organizations, and the public to find acceptable disposal alternatives and to address the various regional concerns regarding dredging and disposal of dredged material. LTMS is seeking to develop a technically feasible, environmentally suitable, and economically prudent long-range approach to meeting the San Francisco Bay region's dredging and disposal needs over the next 50 years. The effort is lead by two federal and three state agencies who have the primary responsibility and authority to regulate dredging and dredged material disposal in the Bay area. These agencies are:

- **U.S. Army Corps of Engineers (COE).** For over a century the COE has had the responsibility of maintaining the navigability of the region's and nation's waterways. The COE constructs new congressionally authorized navigation projects, conducts maintenance dredging of existing federal channels, and issues permits for private dredging activities.

- **U.S. Environmental Protection Agency (EPA).** EPA has regulatory oversight authority over disposal activities to ensure that disposal does not result in significant adverse effects on marine and estuarine resources. EPA establishes the environmental criteria and guidelines that dredging projects conducted or permitted by the COE must meet, and EPA reviews all proposed projects based on these criteria and guidelines.

- **San Francisco Bay Conservation and Development Commission (BCDC).** BCDC is responsible for protecting the Bay from unnecessary filling (including fill from dredged material disposal) and for encouraging environmentally and economically sound uses of the Bay. BCDC issues permits for most dredging and disposal activities in the Bay.

- **San Francisco Bay Regional Water Quality Control Board (SFBRWQCB).** SFBRWQCB is responsible for protecting the quality and beneficial uses of the Bay's water. Dredging and disposal projects must be certified by SFBRWQCB as not violating water quality standards. SFBRWQCB also conducts or oversees various environmental monitoring programs with relevance to dredged material management.

- **State Water Resources Control Board (SWRCB).** SWRCB establishes the state's Water Quality Criteria, and oversees the Regional Water Quality Control Boards throughout the state.

III. ENVIRONMENTAL IMPACTS:

	Yes	Maybe	No
1. Earth. Will the proposal result in:			
a. Unstable earth conditions or changes in geologic structures?		X	
b. Disruptions, displacements, compaction or over-covering of the soil?	X		
c. Change in topography or ground surface relief features?	X		
d. The destruction, covering or modification of any unique geologic or physical features?		X	
e. Any increase in wind or water erosion of soils, either on or off the site?		X	
f. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?		X	
g. Exposure of people or property to geologic hazards such as earthquakes, landslides, mud slides, ground failure, or similar hazards?			X
2. Air. Will the proposal result in:			
a. Substantial air emissions or deterioration of ambient air quality?	X		
b. The creation of objectionable odors?		X	
c. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?			X

	Yes	Maybe	No
3. Water. Will the proposal result in:			
a. Changes in currents, or the course of direction of water movements, in either marine or fresh waters?		X	
b. Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?	X		
c. Alterations to the course or flow of flood waters?	X		
d. Change in the amount of surface water in any water body?			X
e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?	X		
f. Alteration of the direction or rate of flow of ground waters?		X	
g. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?		X	
h. Substantial reduction in the amount of water otherwise available for public water supplies?			X
i. Exposure of people or property to water related hazards such as flooding or tidal waves?			X
4. Plant Life. Will the proposal result in:			
a. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants)?		X	

	Yes	Maybe	No
b. Reduction of the numbers of any unique rare or endangered species of plants?		X	
c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?		X	
d. Reduction in acreage of any agricultural crop?	X		
5. Animal Life. Will the proposal result in:			
a. Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms or insects)?		X	
b. Reduction of the numbers of any unique, rare or endangered species of animals?		X	
c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?		X	
d. Deterioration to existing fish or wildlife habitat?		X	
6. Noise. Will the proposal result in:			
a. Increase in existing noise levels?		X	
b. Exposure of people to severe noise levels?		X	
7. Light and Glare. Will the proposal produce new light or glare?		X	
8. Land Use. Will the proposal result in a substantial alteration of the present or planned land use of an area?	X		